

Virginia, *Fernald & Long*, no. 8841; FIG. 5, pubescence of stem,  $\times 10$ , from dry woods near Middletown, Frederick Co., Virginia, *Hunnewell*, no. 14,019; FIG. 6, leaf  $\times 1$ , illuminated from below, from no. 8841.

PLATE 1083, *HELIANTHUS ANGUSTIFOLIUS* L., var. *PLANIFOLIUS* Fernald, all figs. from TYPE. Sufficiently explained in caption of plate.

PLATE 1084, *HELIANTHUS ANGUSTIFOLIUS* L.: FIG. 1, TYPE,  $\times$  ca.  $\frac{1}{4}$ , courtesy of Dr. J. RAMSBOTTOM; FIG. 2, ascending caudex and erect basal sprouts,  $\times 1$ , from pineland northwest of Waverly, Virginia, *Fernald & Long*, no. 6904.

PLATE 1085, *HELIANTHUS FLORIDANUS* Gray, all figs.  $\times 1$ ; FIGS. 1 and 2, portions of TYPE; FIG. 3, characteristic stoloniferous base, from Duval County, Florida, *A. H. Curtiss*, no. 1437.

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## THE INADEQUATE BASIS OF THE NAME CARYA PECAN

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Of recent years the Pecan, long and correctly called *Carya illinoensis* (Wang.) K. Koch, has taken on the alluring and quite obvious specific epithet *Pecan*. Under this seemingly appropriate epithet it was published as *Hicoria Pecan* (Marsh.) Britton in Bull. Torr. Bot. Cl. xv. 282 (1888), this specific name promptly accepted by Dippel, Koehne, Coulter, Sargent, Rehder and others, although Sargent in 1889 preferred *Hicorius Pecan* (Marsh.) Sargent in Gard. & For. ii. 460 (1889). Under *Carya* it is *C. Pecan* (Marsh.) Engler & Graebn. in Notizblatt, Append. ix. 19 (1902).

That the name *Juglans Pecan* Marsh. Arb. Am. 69 (1785) antedates *J. illinoensis* Wangenheim, Nordam. Holz., 54, t. xviii, fig. xliii or xxxxiii (1787) there is no doubt, but Wangenheim gave a detailed description and a plate showing a characteristic leaf of "The Illinois Walnut Tree"; he had not got hold of the native name "Pecan"; but Marshall had picked up "Pecan" and not much else. Here was Marshall's account:

### 8. JUGLANS pecan. *The Pecan, or Illinois Hickery.*

This tree is said to grow plenty in the neighbourhood of the Illinois river, and other parts to the westward. The young plants raised from these nuts, much resemble our young Pig-nut Hickerys. The nuts are small and thin shelled.

That is all. The only really descriptive phrase is the last one: "nuts . . . small and thin shelled", with nothing about their distinctive shape, color, 2-locular base and sweet kernel; nor of the winged sutures of the exocarp, nor of the many falcate-

recurving leaflets, etc., etc. This is in marked contrast with the really fairly clear descriptions of all the other "Hickerys" of Marshall, as, for instance, his

5. *JUGLANS alba minima*. *White, or Pig-nut Hickery*.

This generally grows pretty large, sometimes to the height of eighty feet or more, and above two feet in diameter. The bark of young trees is smooth, but when older becomes rough and furrowed. The leaves are generally composed of five pair of lobes and an odd one, which are mostly narrower than those of many other kinds. The fruit is small and roundish, and covered with a very thin husk or covering, opening in divisions. The shell of the nut is also very thin, and easily cracked with the teeth; the kernel plump and full but very bitter. The timber of this is not much esteemed.

This, obviously, is a reasonably good account of *Carya cordiformis* (Wang.) K. Koch. The distinctive characters for his *Juglans Pecan* given by Marshall were: (1) "The young plants . . . resemble those of our young Pig-nut Hickerys"; (2) "The nuts are small and thin shelled", whereas his Pig-nut Hickery was described as having "fruit . . . small . . ., shell of the nut . . . very thin". The differences are not convincingly stated. Sargent, Man. ed. 2, also describes the nut of *C. cordiformis* as "with a thin brittle shell"; that of *C. ovata* "with a usually thin shell, . . . seed . . . sweet", its var. *ellipsoidalis* (from New York to Missouri) "with ellipsoidal . . . nuts abruptly long-pointed at apex" (the nut of the Pecan described as "ovoid to ellipsoidal" with "pointed apex").

Marshall, quite clearly, did not give any really distinctive characters for his *Juglans Pecan*. The only really distinctive point he had was the colloquial name; the other points mentioned by him are also characteristic of a number of Hickories of Illinois, "and other parts to the westward". Unless we treat colloquial names as diagnoses the Marshall account is too inadequate (*nomen subnudum*) for acceptance as a distinctive description. Wangenheim's *Juglans illinoensis* was well described and illustrated, even to the elongate fruit, for, although he had and illustrated from material cultivated on Long Island curved ("fructu reniforme") fruit, it is probable that he had material in which the fruit was not well filled. If we are to accept only names of indubitable application *Carya Pecan* should be discarded in favor of *C. ILLINOENSIS* (Wang.) K. Koch.